IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/572,990

Confirmation Number: 6932

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Applicant(s): Joachim Bruchlos et al.

Entitled: ACCESSING A ERP APPLICATION OVER THE

INTERNET USING STRONG TYPED DECLARATIVE LANGUAGE FILES

Examiner: STRODER, CARRIE A

Group Art Unit: 3689

Attorney Docket No.: DE920030057US1 (7161-462U)

APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed May 2, 2011, wherein the Appellants appeal from the Examiner's rejection of claims 14, 21, 28, and 35-53.

I. REAL PARTY IN INTEREST

The subject patent application (the "Application") has been assigned to International Business Machines Corporation by assignment recorded on February 7, 2007, at Reel 018862, Frame 0231.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 14, 21, 28, and 35-53 are pending in the Application and have been rejected at least twice. It is from the multiple rejections of claims 14, 21, 28, and 35-53 that this Appeal is taken. Claims 1-13, 15-20, 22-27, and 29-34 have been cancelled.

IV. STATUS OF AMENDMENTS

No claims were amended after the final official action dated January 31, 2011 (the "Final Office Action").

V. SUMMARY OF CLAIMED SUBJECT MATTER

With respect to claim 14, a computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, has been claimed. (Page 17, lines 26-28) The method includes creating the contract data comprising contract selection parameters for subsequently selecting at least one service contract out of the plurality of contracts. (Page 25, lines 22-29) The method also includes including the contract data into a request for the service. (Page 25, lines 1-5) The method further includes issuing. via the network, the request for the service. (Page 25, lines 6-8) Finally, the method includes receiving, via the network, the service according to a selection of the at least one service contract based upon the contract selection parameters. (Page 25, line 19)

With respect to claim 21, a service requester computer server hardware system for processing contract data associated with services to be provided via a network in an infrastructure in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications has been claimed. (Page 17, lines 26-28) The

system includes at least one processor, wherein the at least one processor configured for creating the contract data comprising contract selection parameters for subsequently selecting at least one service contract out of said plurality of contracts (page 25, lines 22-29); including the contract data into a request for said service (page 25, lines 1-5); issuing the request for the service via network (page 25, lines 6-8); and receiving the service according to a selection of the at least one service contract based upon the contract selection parameters (page 25, line 19).

With respect to claim 28, a computer usable tangible medium having computer readable instructions embodied therein for processing contract data associated with services to be provided via a network in an infrastructure in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications has been claimed. (Page 17, lines 26-28) The computer readable instructions, when executed on a computer system, causing the computer system to perform the operations comprising: creating the contract data comprising contract selection parameters for subsequently selecting at least one service contract out of the plurality of contracts (page 25, lines 22-29); including the contract data into a request for the service (page 25, lines 1-5); issuing, via the network, the request for the service (page 25, lines 6-8); and receiving, via the network, the service

according to a selection of the at least one service contract based upon the contract selection parameters (page 25, line 19).

With respect to claim 35, a computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications has been claimed. (Page 17, lines 26-28) The method includes receiving, via the network, the contract data included in a request with which the service is requested. (Page 25, lines 9-11) The contract data includes contract selection parameters for selecting at least one service contract out of the plurality of contracts. (Page 25, lines 22-29) The method also includes evaluating the contract selection parameters. (Page 25, lines 11-12) The method further includes selecting one particular contract according to the evaluation and further selection logic. (Page 25, lines 13-16) Finally, the method includes providing, via the network, the service according to the contract. (Page 25, lines 18-19)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The rejection of claims 14, 21, 28, 35-36, 40, 42, 46, 48, and 52 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,148,290 to Dan et al.

(Dan) in view of U.S. Patent Application Publication No. 2002/0178120 by Reid et al. (Reid).

The rejection of claims 37-39, 43-45, and 49-50 under 35 U.S.C. § 103(a) as being unpatentable over Dan in view of Reid and further in view of SOAP ("SOAP Version 1.2 part 1: Messaging Framework", W3C, 2 October 2001).

The rejection of claims 41, 47, and 53 under 35 U.S.C. § 103(a) as being unpatentable over Dan in view of Reid and further in view of U.S. Patent Application Publication No. 2005/0198111 by Lamb et al. (Lamb).

VII. THE ARGUMENT

THE REJECTION OF CLAIMS 14, 21, 28, 35-36, 40, 42, 46, 48, AND 52 UNDER 35 U.S.C. § 103

Claims 14, 21, 28, 35-36, 40, 42, 46, 48, and 52 have been rejected 35 U.S.C. § 103(a) as being unpatentable over Dan in view of Reid. For the convenience of the Honorable Board, claims 36 and 40 stand or fall together with independent claim 14; claims 42 and 46 stand or fall together with independent claim 21; and claims 48 and 52 stand or fall together with independent claim 28.

With respect to the Examiner's determination of obviousness, it is noted that the law of obviousness under 35 U.S.C. § 103(a) and the Examination Guidelines

set forth in M.P.E.P. 2141 (specifically, rationale (A) of M.P.E.P. 2141) require Examiner to locate all claimed teachings in the combination of cited references.

Specifically, exemplary claim 14 sets forth a computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications. For the convenience of the Honorable Board, the entirety of claim 14 has been reproduced herein as follows:

14. A computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, the method comprisine:

creating said contract data comprising contract selection parameters for subsequently selecting at least one service contract out of said plurality of contracts:

including said contract data into a request for said service; issuing, via the network, said request for said service; and receiving, via the network, the service according to a selection of the at least one service contract based upon the contract selection parameters.

Integral to claim 14 (and also claims 21, 28, and 35) is the inclusion of the contract data that includes contract selection parameters for subsequently selecting at least one service contract out of the plurality of contracts into a request for the service. Appellants submit that at least this limitation is not disclosed by any of the cited references or any combination thereof.

Notwithstanding, in rejecting this limitation, Examiner stated on page 3 of the Final Office Action the following:

including said contract data into a request for said service (col. 7, line 24 thru col. 8, lines 20; "in step 720, the contract enforcement code is generated and integrated with the service implementation code for enabling actual runtime invocation. FIG. 8 illustrates the use of the contract enforcement code during runtime, according to an embodiment of the present invention. In step 800, an external request (or message, or document) arrives at a particular enforcement code component. The contract enforcement code then determines, based on the incorporated rules of interaction, the current interaction state and the interaction history of the service (e.g., requests and responses received), and whether such a request (or message, or document) is acceptable from the specific requester as per the rules of interaction!");

For the convenience of the Honorable Board, col. 7, line 24 to col. 8, line 20 of Dan, cited by Examiner, has been reproduced herein as follows:

FIG. 7 illustrates the development of the contract enforcement code and its integration with a service application, according to an embodiment of the present invention. First, in step 701, the parties create a joint formal document, referred to as the service contract. As indicated hereinabove, the service contract also can be created by a subset of the parties. The elements of one embodiment of the contract are detailed hereinbelow with regard to FIG. 9. The service contract is then registered, in step 710, by all interacting parties in their respective servers. This registration preferably includes storing of a service contract identification number. information regarding the service contract and the service contract itself. In a preferred embodiment, a tool is available for automatically generating enforcement code. The registration aids in this automatic generation of the parties' role-specific contract enforcement code. In the absence of such a tool, however, the code is written by hand, capturing the rules of interaction specified in the contract. The code also contains information on the local application, such as how to invoke the local application, what specific method to call upon receiving a specific message, request or document. Finally, in step 720, the contract enforcement code is generated and integrated with the service implementation code for enabling actual runtime invocation.

FIG. 8 illustrates the use of the contract enforcement code during runtime, according to an embodiment of the present invention. In step 800, an external request (or message, or document) arrives at a particular enforcement code component. The contract enforcement code then determines, based on the incorporated rules of interaction, the current interaction state and the interaction history of the service (e.g., requests and responses received), and whether such a request (or message, or document) is acceptable from the specific requester as per the rules of interaction, in step 810. If the request is determined to be acceptable, the contract enforcement code invokes, in step 820, an appropriate application method (or program). After the appropriate service implementation logic is executed to provide this service, a response may be generated. Note that the execution may be synchronous or asynchronous with the client request. The service logic may be a simple program or a multi-step execution synchronously or asynchronously involving business rules and internal methods where the business rules specify how the next method or execution step is to be selected. That is, the service logic may be adapted to support long-running interactions or sequences of interactions which are timed apart. For example, the logic can support a situation in which a customer requests a reservation with a hotel service provider and requests a cancellation days later. In this example, the service contract of the present invention will capture the rules of interaction for such timed-apart interactions. The service logic may also make requests on other partners via other service contract enforcement code or via the same contract enforcement code. Hence, if there is a response to the original request, the service implementation logic sends the response to the particular contract enforcement code, in step 830. The contract enforcement code may add this response to the history of interactions, before sending it back to the original requester. Finally, if the original request is determined to be unacceptable, in step 810, the requester may be notified of this rejection in step 840. The contract enforcement code may also specify independent action to be taken by a partner in the absence of a response from another partner within a pre-specified time.

Thus, Dan teaches the development of the contract enforcement code and its integration with a service application.

Of note, an important aspect of the Appellants' claimed invention is to include contract selection parameters into the service request (particularly into the query string of the endpoint address of the request) so that the requestor can have

influence on the contract selection. Clearly, Dan as reproduced above does not disclose using the contract selection parameters to select at least one service contract out of a plurality of contracts. Rather, Dan concerns the enforcement of one contract, not the selection among multiple contracts. Dan further does not disclose the inclusion of the contract selection parameters into a request. Reid does not cure the deficiency of Dan. Reid discloses a database that may be searched for particular agreements based on several parameters. However, Reid does not disclose that the parameters are included in the service request.

Since the Examiner has not located all claimed teachings in the combination of cited references, Appellants submit that Examiner has not established a prima facie case of obviousness under the law and Appellants solicit the Honorable Board to reverse the rejections set forth thereby.

THE REJECTION OF CLAIMS 37-39, 43-45, AND 49-50 UNDER 35 U.S.C. § 103

For the convenience of the Honorable Board, claims 37-39 stand or fall together with independent claim 14; claims 43-45 stand or fall together with independent claim 21; and claims 49-50 stand or fall together with independent claim 28

THE REJECTION OF CLAIMS 41, 47, AND 53 UNDER 35 U.S.C. § 103

For the convenience of the Honorable Board, claim 41 stands or falls

together with independent claim 14; claim 47 stands or falls together with

independent claim 21; and claim 53 stands or falls together with independent claim

28.

In view of the foregoing, reversal of the rejections under 35 U.S.C. § 103 is

respectfully requested.

Date: July 2, 2011

Respectfully submitted,

/Steven M. Greenberg/ Steven M. Greenberg Registration No. 44,725

Customer Number 46320

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VIII. CLAIMS APPENDIX

14. A computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, the method comprising:

creating said contract data comprising contract selection parameters for subsequently selecting at least one service contract out of said plurality of contracts;

including said contract data into a request for said service;
issuing, via the network, said request for said service; and
receiving, via the network, the service according to a selection of the at least

one service contract based upon the contract selection parameters.

21. A service requester computer server hardware system for processing contract data associated with services to be provided via a network in an infrastructure in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, the system comprising:

at least one processor, wherein the at least one processor configured for creating said contract data comprising contract selection parameters for subsequently selecting at least one service contract out of said plurality of contracts;

including said contract data into a request for said service;
issuing said request for said service via network; and
receiving the service according to a selection of the at least one
service contract based upon the contract selection parameters.

28. A computer usable tangible medium having computer readable instructions embodied therein for processing contract data associated with services to be provided via a network in an infrastructure in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, the computer readable instructions, when executed on a computer system, causing the computer system to perform the operations comprising:

creating said contract data comprising contract selection parameters for subsequently selecting at least one service contract out of said plurality of contracts:

including said contract data into a request for said service;

issuing, via the network, said request for said service; and receiving, via the network, the service according to a selection of the at least one service contract based upon the contract selection parameters.

35. A computer-implemented method for processing contract data associated with services to be provided via a network in an infrastructure, in which a plurality of binding contracts exists between a service provider and a service requestor for services having a respective number of service specifications, the method comprising:

receiving, via the network, said contract data included in a request with which the service is requested, wherein said contract data comprises contract selection parameters for selecting at least one service contract out of said plurality of contracts:

evaluating said contract selection parameters;

selecting one particular contract according to said evaluation and further selection logic; and

providing, via the network, the service according to said contract.

36. The method according to claim 14, wherein

said contract data is processed via software interfaces adapted to comprise said contract data, said interfaces comprising respective definitions of the transport protocol in use, of the messaging protocol in use and on an associated port type in use.

- The method according to claim 14, wherein said contract data is processed within header fields of a web service request.
- The method according to claim 14, wherein said contract data is processed as a part of the endpoint specification of a respective service request.
- The method according to claim 14, wherein said contract selection parameters are transported in a SOAP message conforming to the SOAP standard.
- The method according to claim 14, wherein
 multiple contract selection parameters are combined in a single service
 request.

- The method according to claim 14, wherein said contract selection parameters comprise meta-data identifying a particular contract.
- 42. The system according to claim 21, wherein said contract data is processed via software interfaces adapted to comprise said contract data, said interfaces comprising respective definitions of the transport protocol in use, of the messaging protocol in use and on an associated port type in use.
- The system according to claim 21, wherein said contract data is processed within header fields of a web service request.
- 44. The system according to claim 21, wherein said contract data is processed as a part of the endpoint specification of a respective service request.
- 45. The system according to claim 21, wherein said contract selection parameters are transported in a SOAP message conforming to the SOAP standard.

- The system according to claim 21, wherein multiple contract selection parameters are combined in a single service request.
- The system according to claim 21, wherein said contract selection parameters comprise meta-data identifying a particular contract.
- 48. The computer usable tangible medium according to claim 28, wherein said contract data is processed via software interfaces adapted to comprise said contract data, said interfaces comprising respective definitions of the transport protocol in use, of the messaging protocol in use and on an associated port type in use.
- The computer usable tangible medium according to claim 28, wherein said contract data is processed within header fields of a web service request.
- 50. The computer usable tangible medium according to claim 28, wherein

said contract data is processed as a part of the endpoint specification of a respective service request.

- 51. The computer usable tangible medium according to claim 28, wherein said contract selection parameters are transported in a SOAP message conforming to the SOAP standard.
- The computer usable tangible medium according to claim 28, wherein multiple contract selection parameters are combined in a single service request.
- 53. The computer usable tangible medium according to claim 28, wherein said contract selection parameters comprise meta-data identifying a particular contract.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.